

SEM

4



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/706,844	11/07/2000	Richard O. Grant	1139-201	8540

7590 09/25/2002

Lieberman & Brandsdorfer LLC
12221 McDonald Chapel Drive
Gaithersburg, MD 20878-2252

EXAMINER

PRONE, JASON D

ART UNIT	PAPER NUMBER
----------	--------------

3724

DATE MAILED: 09/25/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

3.M-

Office Action Summary

Application N .

09/706,844

Applicant(s)

GRANT ET AL.

Examiner

Jason Prone

Art Unit

3724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 June 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 28 June 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: On page 1 line 7, the word "gras" should be replaced with "grass".

On page 5 line 5, the phrase "collar 48" should be replaced with "collar 42".

Appropriate correction is required.

Claim Objections

2. Claim 1 is objected to because of the following informalities: On line 10 of amended claim 1, the word "lesser" should be replaced with "that is less". Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-8 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

On lines 6 and 10 in the amended claim 1, the phrases "...flange includes an external diameter greater than an external diameter of said collar..." and "...collar includes an external diameter lesser than the external diameter of said flange..." are redundant, therefore one of the two phrases should be deleted.

On line 2 in the amended claim 3, the phrase "...the proximal end to the distal end" is unclear because it is uncertain which proximal and distal ends are being referred to (collar or monofilament).

5. Claims 7 and 14 recite the limitation "the distance" on line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 3-7, 9-14, 17, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Jacyno et al.

Jacyno et al. discloses the same invention including an elongate monofilament (28) having a proximal (35) and distal end (29), a collar secured to the distal end of the monofilament (Fig. 5), that the collar comprises a proximal and distal end (Fig. 5), that the proximal end of the collar comprises a flange (31), that the flange includes an external diameter (37) greater than an external diameter of the collar (Fig. 4), that the flange is adapted to place the monofilament adjacent to an aperture in a trimming device (Fig. 3), that the distal end of the collar extends from the distal end of the monofilament to the flange (Fig. 5), that the collar comprises a hollow circular cross-section (Fig. 4) adapted to extend from the proximal to the distal end (Fig. 5), that the distal end of the monofilament is flush with the collar (Fig. 4), that the collar is crimped

to the monofilament (Fig. 4 {Examiner notes that the word "crimped" means to be an inhibiting or restraining influence on an object}), that the crimp forms an indentation into the monofilament (Although no indentation is shown in Jacyno et al., it is inherent that, in order for the collar to restrain the monofilament, contact must be made. The force applied to the monofilament from the collar would create a deformation or in this case an indentation), a trimmer (Fig. 1) comprising a cutting head (Fig. 2) with a housing (32) with a first end adapted to mount a drive shaft (36) and a second end (44) having elongated annular flange (31) and an aperture in the flange (28), that the aperture extends from an interior wall (47) to an exterior wall (Fig. 7), that the flange is adapted to be placed in communication with the interior wall (Fig. 3), that a portion of the monofilament extending from the distal end of the collar to the flange and the collar both rest within the interior wall (Fig. 3), that the crimp is located $\frac{1}{3}$ the distance from the distal end of the collar (Fig. 7), and that the collar is comprised of a metallic material (Fig. 5).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 2, 8, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacyno et al. in view of Legrand. Jacyno et al. discloses the invention {listed above} and the positioning of the collar and crimp but fails to disclose that this reduces

stress and strain on the monofilament and that monofilament has a non-circular cross section. Legrand teaches that it is known in the art to have the proper mechanical properties (stress and strain) to allow it to fulfill its role as a cutting line (Column 1 line 60-65) and a monofilament has a non-circular cross section (2). Therefore, it would have been obvious to one skilled in the art, at the time of the invention, to have provided Jacyno et al. with this knowledge to create the most efficient cutting line.

10. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jacyno et al. in view of White, III. Jacyno et al. discloses the invention {listed above} but fails to disclose a spur mounted between the flange and the proximal end of the monofilament. White, III teaches the use of a spur (24) mounted between the flange and the proximal end of the monofilament (Fig. 3). Therefore, it would have been obvious to one skilled in the art, at the time of the invention, to have provided Jacyno et al. with a spur for an addition stopping means.

11. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jacyno et al. Jacyno et al. discloses the invention {listed above} but fails to disclose that the metallic material is brass. It would have been obvious to one having ordinary skill in the art at the time the invention was made to form the collar out of brass, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Response to Arguments

Art Unit: 3724

12. Applicant's arguments with respect to claims 1-19 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Iacona et al., Watkins, Webster, Klein, Everts et al., Paolo, Ishikawa, and Luick.

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Prone whose telephone number is 703-605-4287. The examiner can normally be reached on 7:30-5:00, Mon - (every other) Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allen N. Shoap can be reached on 703-308-1082. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3597 for regular communications and 703-305-3597 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.



JP
September 20, 2002



M. Rechuba
Primary Examiner